

2020 CERTIFICATION

Consumer Confidence Report (CCR)

Cecrler Air Force Bure
Public Water System Name

M SO 24 OO 4 9 List PWS ID #s for all Community Water Systems included in this CCR

The Federal Safe Drinking Water Act (SDWA) requires each Community Public Water System (PWS) to develop and distribute a Consumer Confidence Report (CCR) to its customers each year. Depending on the population served by the PWS, this CCR must be mailed or delivered to

the customers, published in a newspaper of local circulation, or provided procedures when distributing the CCR.	to the customers upon request. M	ake sure you follow the proper
CCR DISTRIBUTION (Chec	ck all boxes that apply.)	
INDIRECT DELIVERY METHODS (Attach copy of publication, water	bill or other)	DATE ISSUED
□ Advertisement in local paper (Attach copy of advertisement)		
□ On water bills (Attach copy of bill)		
★ Email message (Email the message to the address below)		6/27/2041
& Other website and porting		6/23/2021
DIRECT DELIVERY METHOD (Attach copy of publication, water bill	or other)	DATE ISSUED
□ Distributed via U. S. Postal Mail		
國 Distributed via E-Mail as a URL (Provide Direct URL): 小井の: 川山のい	Feesler of mil/portals/14/202	57.67.101
B Distributed via E-Mail as an attachment	102412-1-2012 porty 20A0962	6/28/2021
$\hfill\Box$ Distributed via E-Mail as text within the body of email message		
$\hfill \square$ Published in local newspaper (attach copy of published CCR or production).	oof of publication)	
		6/25/2021
☑ Posted online at the following address (Provide Direct URL): https://www.pozdocom	www. reester. of mil/portals.	14/20A 6/23/2021
I hereby certify that the CCR has been distributed to the customers above and that I used distribution methods allowed by the SDWA. and correct and is consistent with the water quality monitoring data Water Supply.	s of this public water system in th I further certify that the information	e form and manner identified n included in this CCR is true
ALFred A. WAStins of	Base Water Office	L 6/28/2021 Date
SUBMISSION OPTIONS (Se	· ·	4 11000
Mouf must email, fax (not preferred), or mail a cop	-	
MSDH, Bureau of Public Water Supply P.O. Box 1700	Email: <u>water.reports@msdh.ms.g</u> d Fax: (601) 576-7800	(NOT PREFERRED)
Jackson, MS 39215		

CCR DEADLINE TO MSDH & CUSTOMERS: BY JULY 1, 2021

Consumer Confidence Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) for Keesler Air Force Base (KAFB) and the Biloxi Veterans Administration Medical Center (BVAMC) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Where does my water come from?

Drinking water from KAFB/BVAMC, which will be referred to as Keesler throughout the document, is pumped from the Lower Graham Ferry Aquifer; a groundwater source. All water provided to Keesler is pumped from wells located on base property. The water from the wells is mixed, treated, stored, and distributed.

Is my water safe?

Yes, drinking water at Keesler is safe. Bioenvironmental Engineering follows all regulatory compliance regarding drinking water testing directed by the EPA. The purpose of this assessment is to determine the quality of the raw water used for drinking water. At Keesler, the only treatment performed on source water is the addition of chlorine and fluoride. Because of the limited chemical treatment, the analytical results for Keesler's drinking water are representative of its source water.

Do I need to take special precautions?

Most people do not need to take special precautions. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some

cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Those substances include microbial contaminants, inorganic contaminants, and organic Chemical Contaminants. More information regarding these substances can be found at https://www.epa.gov/ccl/types-drinking-water-contaminants. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

How is the water treated?

Your water is treated by chlorine disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

How can I get involved?

Education is key to getting involved and understanding your drinking water. Additional information is available from the Environmental Protection Agency; located at http://www.epa.gov/safewater/.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Use the most ecofriendly option for clothes washer and dishwashers.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

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Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact BE so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it.

- Boiler/Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

What can I do to help protect our drinking water?

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with your local government or water supplier.

 Stencil a message next to the street drain reminding people "Dump No Waste Drains to

River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Other Information

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", MS0240049 is required to report certain results pertaining to fluoridation of our water system. The monthly average fluoride result for each month in the previous calendar year was within the optimal range of 0.6 - 1.2 ppm. Additionally, 89% of all fluoride samples collected in the previous calendar year were within the optimal range of 0.6 - 1.2 ppm.

Results of voluntary monitoring

In May 2016, the EPA issued Drinking Water Health Advisories for both perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), organic chemicals that are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). PFASs have been used in the production of materials (e.g. cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields as part of Aqueous Film Forming Foam (AFFF) fire extinguishing agent and in a number of industrial processes. While the EPA has not established national primary drinking water regulations for PFOA or PFOS, the EPA established a health advisory (HA) level of 70 nanograms per liter (ng/L) (aka. parts per trillion(ppt)) for the combined concentration of these chemicals. Since then, the Department of Defense has proactively directed all installations to test their drinking water for PFOS and PFOA. In November 2020, Keesler Bioenvironmental Engineering (BE) Flight and the Civil Engineering Water Operations section collected all required samples from each operational well and/or treatment facility on base. All results were below the laboratory's 1.8 ng/L detection level/minimum reporting limit (MRL).

Additional Information for Lead

Your water meets the EPA's standard for lead. Although your water does not have elevated levels of lead in your drinking water, when elevated levels of lead are present it can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Keesler Air Force Base is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may contact BE to discuss having your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Additional Information for Arsenic

Your drinking water meets EPA's standard for arsenic. Though trace amounts may have been in water samples collected, not enough arsenic was present to give an actual numerical result based on standard testing limitations. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations, and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants detected during the calendar year that require mandatory reporting. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

	MCLG or	MCL, TT, or	Detect In Your		ected nge	Sample		
Contaminants	MRDLG			Low	High		Violation	Typical Source
Disinfectants & Dis	infection B	y-Produ	cts					
(There is convincing	evidence th	nat additi	on of a disi	nfecta	nt is ne	cessary f	or control o	of microbial contaminants)
Chlorine (as Cl2) (ppm)	4	4	1.2*	0	2.89	2020	No	Water additive used to control microbes

	MCLG	MCL, TT, or	Detect Your	in D	ected ange	Sample		
Contaminants	MRDLG		Wate		High	Date	Violatio	n Typical Source
Haloacetic Acids (HAA5) (ppb)	NA	60	15	NA	NA	2020	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	13.2	NA	NA	2020	No	By-product of drinking water disinfection
Inorganic Contamir	ants							
Barium (ppm)	2	2	0.010	2 NA	NA	2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppm)	0.1	0.1	0.002	2 NA	NA	2020	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.866	5 NA	NA	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Volatile Organic Co	ntaminant	s					1 - 1	
Xylenes (ppm)	10	10	0.00124	49 NA	NA	2020	No	Discharge from petroleum factories; Discharge from chemical factories
Contaminants	MC	LG AL	Your Water	Sample Date	# San Excee	ding	Exceeds AL	Typical Source
Inorganic Contamir	ants							Tolk, Till Pill III
Copper - action level consumer taps (ppm)		3 1.3	0.0477	2020	0		No J	Corrosion of household olumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	2.21	2020	0		No I	Corrosion of household olumbing systems; Erosion of natural deposits

^{*} Value is the highest quarterly running annual average during calendar year 2020

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
1,1,1-Trichloroethane (ppb)	200	200	ND	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	ND	No	Discharge from industrial chemical factorie
1,1-Dichloroethylene (ppb)	7	7	ND	No	Discharge from industrial chemical factorie
1,2,4-Trichlorobenzene (ppb)	70	70	ND	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	0	5	ND	No	Discharge from industrial chemical factorie
1,2-Dichloropropane (ppb)	0	5	ND	No	Discharge from industrial chemical factorie
Antimony (ppb)	6	6	ND	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; tes addition.
Arsenic (ppb)	0	10	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Benzene (ppb)	0	5	ND	No	Discharge from factories; Leaching from ga storage tanks and landfills
Beryllium (ppb)	4	4	ND	No	Discharge from metal refineries and coal- burning factories; Discharge from electrical aerospace, and defense industries
Cadmium (ppb)	5	5	ND	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Carbon Tetrachloride (ppb)	0	5	ND	No	Discharge from chemical plants and other industrial activities
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	No	Discharge from chemical and agricultural chemical factories
Cyanide (ppb)	200	200	ND	No	Discharge from plastic and fertilizer factoric Discharge from steel/metal factories
Dichloromethane (ppb)	0	5	ND	No	Discharge from pharmaceutical and chemic factories
Ethylbenzene (ppb)	700	700	ND	No	Discharge from petroleum refineries
Mercury [Inorganic] (ppb)	2	2	ND	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfil Runoff from cropland
Nitrate [measured as Nitrogen] (ppm)	10	10	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
Selenium (ppb)	50	50	ND	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Styrene (ppb)	100	100	ND	No	Discharge from rubber and plastic factories; Leaching from landfills
Tetrachloroethylene (ppb)	0	5	ND	No	Discharge from factories and dry cleaners
Thallium (ppb)	0.5	2	ND	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories
Toluene (ppm)	1	1	ND	No	Discharge from petroleum factories
Trichloroethylene (ppb)	0	5	ND	No	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	0	2	ND	No	Leaching from PVC piping; Discharge from plastics factories
cis-1,2-Dichloroethylene (ppb)	70	70	ND	No	Discharge from industrial chemical factories
o-Dichlorobenzene (ppb)	600	600	ND	No	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	75	75	ND	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	ND	No	Discharge from industrial chemical factories

nit Descriptions					
Term	Definition				
ppm	ppm: parts per million, or milligrams per liter (mg/L)				
ppb	ppb: parts per billion, or micrograms per liter ($\mu g/L$)				
NA	NA: not applicable				
ND	ND: Not detected				
NR	NR: Monitoring not required, but recommended.				

portant Dri	nking Water Definitions
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Important Drin	king Water Definitions
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

Contact Name: 1st Lt Carli Cline

Address: 81 OMRS/SGXB Bioenvironmental Engineering 301 Fisher St., BLDG 420

Keesler AFB, MS 39534 Phone: (228) 376-0590
 From:
 81 TRW/PA

 To:
 Keesler All

Subject: 2020 Water Quality Report

Date: Monday, June 28, 2021 11:12:55 AM

Good Morning Team Keesler,

The 81st OMRS recently released the 2020 Water Quality Report. We have provided a link below where the information can be viewed.

https://www.keesler.af.mil/News/Article-Display/Article/2672751/keesler-releases-2020-water-guality-report/fbclid/lwAR1r16uosS5GISA4aOxZITWy9rZK_OKbXC-U-HGjnZacoYD3InoXwajiZeE/

V/R

81st Training Wing Public Affairs

From: Norton, Kevin W TSqt USAF 81 MDG (USA)

To: Brown, Jordin M A1C USAF (USA); Castillo, Carlos SrA USAF (USA); King, Arina N SSgt USAF (USA); Raetz.

William G SSqt USAF (USA); Taylor, Jordan E SrA USAF (USA)

Cc: Cline, Carli E 1st Lt USAF (USA)

Subject: FW: [Non-DoD Source] POSTMASTER: Annual Water System Consumer Confidence Report

Date: Monday, June 28, 2021 12:04:19 PM

Attachments: image004.jpg

image005.png

2020 Consumer Confindence Report AO 20210622.pdf

VA has distro'd to their people; let's finalize/certify and get the CCR to the state!

V/R

KEVIN W. NORTON, TSgt, USAF Flight Chief, Bioenvironmental Engineering 81st Operational Medical Readiness Sq

Keesler AFB, MS 39534 Comm: (228) 376-0590

DSN: 591-0590

From: Weston, Camille S. <Camille.Ballentine@va.gov>

Sent: Monday, June 28, 2021 11:59 AM

Cc: Norton, Kevin W TSgt USAF 81 MDG (USA) <kevin.w.norton2.mil@mail.mil>; Watkins, Alfred A

CIV USAF 81 MSG (USA) <alfred.watkins@us.af.mil>; Tripp, Jay D. <Jay.Tripp@va.gov>

Subject: [Non-DoD Source] POSTMASTER: Annual Water System Consumer Confidence Report

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Head	ler: Special Message		
		2	

Message from Engineering Service:

Mississippi state law requires municipal water systems to report on their operations to the public, annually. The report from Keesler Air Force Base Water Authority is attached for calendar year 2020. Keesler Air Force Base's water system includes the water supplied to the Biloxi VA Medical Center campus.

Should you have additional questions regarding the attached report, contact Lt. Carli Cline at (228) 376-3200 orAlfred "Al" Watkins < Caution-mailto:alfred.watkins@us.af.mil > at (228) 376-8417.

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DEPARTMENT OF THE AIR FORCE **HEADQUARTERS 81ST TRAINING WING (AETC)**

28 June 2021

MEMORANDUM FOR RECORD

FROM: 81 OMRS/SGXB

Bioenvironmental Engineering 301 Fisher Street, Bldg 0420 Keesler AFB, MS 39534

SUBJECT: Public Notification of 2020 Annual Water Quality Report (or Consumer Confidence Report [CCR]) for Keesler AFB

- 1. On 25 June 2021, SrA Carlos Castillo and SrA Jordan Taylor from the Bioenvironmental Engineering (BE) flight provided a physical copy (via drop-off or email) of the Keesler AFB 2020 Annual Water Quality Report Notice for posting in the following locations frequented by individuals who live on base:
 - a. Base Housing Office
 - b. Gulf Coast Veterans Health Care System (Biloxi VA Medical Center)
 - c. Base Gyms:
 - 1) Blake Fitness Center Bldg. 1201
 - 2) Dragon Fitness Center Bldg. 4106
 - 3) Triangle Fitness Center Bldg. 7504
 - d. Base Dining Facilities:
 - 1) Live Oak Dining Facility Bldg. 2001
 - 2) Azalea Dining Facility Bldg. 6960
 - 3) Magnolia Dining Facility Bldg. 7409
 - 4) Hungry Dragon Bldg. 468
 - e. Base Dormitory Manager's Office and on bulletin boards in the following dorms:
 - 1) Biloxi Hall Bldg. 6223
 - 2) Gulfport Hall Bldg. 4908
 - 3) Ocean Springs Hall Bldg. 4904
- 2. Additionally, BE coordinated with 81 TRW Public Affairs to post the CY20 CCR online at https://www.keesler.af.mil/Portals/14/2020%20Consumer%20Confindence%20Report%20AO%2020210 622.pdf. BE also coordinated with the 81 TRW Commander's Executive Assistant to have the 2020 Annual Water Quality Report Notice with the above link sent to the "Keesler All" email distribution list on 28 June 2021. Finally, BE coordinated with the Hunt Housing office to have the same email sent to all base housing residents on 28 June 2021.
- 3. For any questions, please contact the BE Office at 228-376-0590.

NORTON.KEVIN.WI Digitally signed by NFIELD.126944354

NORTON.KEVIN.WINFIELD.126 9443541

Date: 2021.06.28 14:58:25 -05'00'

KEVIN W. NORTON, TSgt, USAF Flight Chief, Bioenvironmental Engineering